Docket No.: 200310972-1

## **ABSTRACT**

In another embodiment, the present invention is directed to a power distribution system for electronic equipment, comprising a voltage bus; a plurality of power supplies coupled in parallel to the voltage bus; a plurality of diodes wherein each of the diodes is disposed between a power supply and the voltage bus to isolate the voltage bus from a low power supply voltage; a plurality of sense lines, wherein each of the sense lines is coupled to one of the plurality of power supplies; and a plurality of resistive elements, wherein each of the resistive elements is coupled to the voltage bus and to a respective sense line of the plurality of sense lines, wherein the plurality of resistive elements maintain, when a minimal load is applied to the voltage bus, the sense lines at a voltage sufficiently lower than a voltage of the voltage bus to cause the plurality of power supplies to prevent the plurality of diodes from being reversed-biased.